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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
WASHINGTON, D. C.

October 7, 1939

MEMORANDUM FOR DR. F. C. CRAIGHEAD

Dear Dr. Craighead:

Reference is made to your memorandum of September 6, regarding data on Buprestis spp. for Mr. Keen.

We have looked over our records and copied a few that may be interesting to Mr. Keen. There is very little literature on these beetles.

Very truly yours,

J. A. Hyslop
In Charge
Insect Pest Survey and Information

Enclosure

Abstracts from papers bearing on the longevity of the larval and pupal stages of Buprestis aurulenta L. and B. langi Mann.

Chamberlin, W. J. Jr. N. Y. Ent. Soc. 32, 188, 1924.

A letter from C. H. Charlton, Portland, Oreg., is quoted: "This bug was found last evening whilst working out of the hand railing of our stairs. The railing has been varnished and kept so for 9 years to my knowledge and has shown no previous borings for the deposit of the egg. It came out at the top surface from a depth of about 5/8 inch. ..... the question in my mind is how long it has taken for development." It was B. aurulenta.

Huguenin, J. C. Ent. News, 26, 364, 1915.

"On May 17, 1915, I received word from Mrs. H. Grandjean, of Oakland, Calif., that she had found a beautiful green beetle, which had been working inside the door stile of the toilette-room and that she had saved it for me. ..... I was shown the door, which I examined carefully. It appears that the lady saw something moving on the door stile, which on closer observation proved to be a beetle trying to escape from inside the stile. She took a penknife and enlarged the hole sufficiently to allow the insect to escape. The beetle was A. aurulenta. During a careful examination of the door, I failed to find any evidence of any other holes, other than the one of exit, which was 1½ inches deep and very nearly perpendicular. Otherwise the door was in perfect condition. From the bottom of the hole some wood dust was removed; it was of the color of healthy, dry, white pine, of which the stile was made. In looking up the history of the house, I found that the present owner, Mr. H. Grandjean, had purchased the house some 21 years ago, and it was at that time 5 years old. The door in which the beetle was found had never been changed or replaced, and had been painted and varnished twice during the 21 years."

Spencer, G. J. Proc. Ent. Soc. Br. Col. 27, 1930, 6.

Several instances are given of the emergence of beetles from prepared timber in buildings.

No. 1. - "Beetles (B. aurulenta) emerging in May from the floor of a church on Mayne Island, B. C. I can not find out how long the church has been built."

No. 2. - "Beetles emerging in summer from the floor of a verandah of a house near Nanaimo. The house was 18 years old when the insects emerged. B. aurulenta."

No. 3. - "Beetles emerging Dec. 25, 1929, and for two weeks afterwards, from a house in Haney. The house is 20 years old. The insects, B. aurulenta again, emerged (a) from an inside wall 1 inch from the ceiling and 29 inches from an outside wall on a western exposure. The outside boards show weathering cracks. (b) The second emergence two weeks afterwards, was from the same wall between two rooms 9½ feet from the outside wall and just above the baseboard."

No. 4. - "A beetle, B. aurulenta, was captured alive in the corridor of the Applied Science Building of the University on Feb. 9, 1930. It may have emerged from the timber of the building which was erected in 1925. Since Feb. 9 was a cold day, it is unlikely that the beetle flew in from the outside."

No. 5. - "A 14-year old house near Duncan, B. C., where a Douglas fir flooring was found to be infested in the area covered by a small rug. In May, 1930, the first complaint was received together with an adult of B. aurulenta which had been dug from a tunnel in the floor. During the winter (1930-31) two of the worst-infested boards were removed and brought to me by Mr. James Kay, of the Hillcrest Lumber Co. The boards are 1" x 4", dressed ¾" x 4, edge grain fir, oiled and polished and contain 6 tunnels, of which one leads to an emergence hole of a beetle, while 3 are irregular openings on the upper oiled surface two of these being made by larvae which are still in the board, because they have ejected sawdust from these holes since the boards were given to me. I have dug out the highly compressed sawdust from the tunnels and find some borings running parallel to the surface of the wood and so close to it that there is only a paper-thickness remaining intact. It is remarkable that the larvae concerned have tunnelled so close to the outside world across 4" strips, without cutting through. It is still more remarkable that one of the tunnels contains packed sawdust in which fibres of wool of several colors occur freely well over an inch from the openings, showing that the larva had chewed the rug and had dragged threads back into its borings. It is not possible to tell from the two boards alone, how extensive the tunnelling has been in the floor, because the holes run right across these boards. But from the fact that, of the 6 openings in two contiguous 4" strips one enters from the underside, it seems possible that the infestation in one instance anyway, may have come up from a floor beam below. There was no basement in the house, so Mr. Kay could not determine this fact for me." (An abstract from this paper is also given under B. langi.)

In the summary of the paper the following is quoted: "The suggestion is offered at this time that these beetles (B. aurulenta, B. langi and Phymatodes dimidiatus) do not necessarily escape several hazards to pass through a greatly protracted larval and pupal period amounting in one case to 20 years, but are capable of developing from eggs laid in cracks in prepared lumber, even of heart-wood, without feeding first on bark, bast, cambium, or sapwood."

"Bugs", the Extension Letter of the State College of Washington, May 23, 1939.

An adult of the aurulent beetle, B. aurulenta, reported as caught in the act of boring up through two thicknesses of flooring in a dwelling in Snohomish County.

Franz, E. Natur. v. Volk. 66, no. 7, p. 370, Frankfurt a.M. July, 1936 (Review of Applied Entomology, 24, 656, 1936).

An adult of B. aurulenta, known as a pest of pine in North America, emerged in 1935 at Frankfurt, from a dresser made 13 years previously, partly of wood of American origin.

Garnett, R. T. Ann. Ent. Soc. Amer., 11, 1918, 90.

Buprestis fasciata var. langi Lec. is nothing but the female of the western phase of B. fasciata F. (He gives Lecant as author of langi; he must mean Mannerheim.)

Spencer, G. J. Proc. Ent. Soc. Br. Col. 27, 1930, 8.

"I watched adults of B. fasciata F. phase langi Mann. (ac. Garnett) on a hot afternoon in August, 1929, going through oviposition movements on the giant flag pole at the University, which is dressed and is seasoning out-of-doors, lying prone on supporting blocks. The beetles moved by rapid spasmodic jerks over the surface of the timber, inspecting the wide cracks in the wood, and on several occasions, backing down the cracks where they remained a minute or so with extended ovipositors. I carefully examined many yards of cracks where the insects had been working to see if eggs had actually been laid, but could not discover any. The cracks were irregular and quite deep, and the chances of finding eggs or not in them were about even. This incident led me to wonder if beetles of the genus Buprestis could develop in wood without passing through bark, bast, and sapwood."